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VEDDER PRICE KAUFMAN & KAMMHOLZ
222 N. LASALLE STREET
CHICAGO, IL 60601

EXAMINER

HA, LEYNNA A

ART UNIT	PAPER NUMBER
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2135

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/855,183

Applicant(s)

VANDERGEEST ET AL.

Examiner

LEYNNA T. HA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-9, 10-12, 16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 and 13-15 is/are allowed.
- 6) ☒ Claim(s) 6-9, 10-12, 16 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Chanky B. M
AU 2135

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/19/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-17 is pending.
2. Claims 6-9 and 16-17 remain rejected.

Claims 1-12 are rejected under 35 U.S.C. 101 as non-statutory.

Claims 1-5 and 10-15 are allowed over art.

Claim 10 (dependent) is objected.

3. This is a Non-Final rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 10-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

Claim 10 recites a storage medium comprising a memory.

According to the specification on page 23 (lines 10-26):

The above operations may be implemented by one or more processing devices that execute instructions stored in a storage medium or any suitable structure as desired. A storage medium may include, for example, one or more remotely accessible database via the Internet, a hard drive, RAM, ROM, CD ROMs, diskettes, or any other suitable storage medium containing executable instructions that when executed by one or more processors causes the one or more processors to carry out one or more of the above operations. For example, the storage medium may contain executable

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instructions that cause the authentication unit to receive, from the first unit, user identification data, that causes, for example, a processor associated with an authentication unit to use the user identification data to determine which destination unit, other than the first unit, will receive an authentication code to be used to authenticate the user. The storage medium may contain executable instructions that when executed by one or more processors causes one or more processors associated with authentication unit or other unit to send the authentication code to the determined destination unit based on the user identification data and to subsequently receive a returned authentication code back after sending the authentication code and authenticate the user, based on the returned authentication code when the returned authentication code matches the sent authentication code.

Specification suggests various storage mediums but by reciting the database accessible via the Internet, or any other suitable storage medium to carry out the operations is non-statutory. The "any other suitable storage medium" can broadly be given as software rather than a physical structure as required by MPEP to be statutory. By accessing a database via the Internet or the process to carry out operations is directed to a carrier signal.

MPEP: 2106.01 [R-5] **> Computer-Related Nonstatutory Subject Matter<

**>Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works, and a compilation or mere arrangement of data.

Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will

be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed.Cir.1994) (discussing patentable weight of data structure limitations in the context of a statutory claim to a data structure stored on a computer readable medium that increases computer efficiency) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”). Such a result would exalt form over substance. In *re Sarkar*, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) (“[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under § 101, the claimed invention, as a whole, must be evaluated for what it is.”) (quoted with approval in *Abele*, 684 F.2d at 907, 214 USPQ at 687). See also *In re Johnson*, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) (“form of the claim is often an exercise in drafting”). Thus, nonstatutory music is not a computer component, and it does not become statutory by merely recording it on a compact disk. Protection for this type of work is provided under the copyright law. When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory and should be rejected under 35 U.S.C. 101. In *re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 403-04 (Fed. Cir. 1983).

Claim Objections

5. Claim 10 objected to because of the following informalities:

independent claim 10 is correct but the proceeding claim is misnumbered as 10 also.

The second claim 10 should be renumbered as claim 11.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6-9 and 16-17 are rejected under 35 U.S.C. 102(e) as being unpatentable over Schmitz (US 6,078,908), and further in view of Dahlen, et al. (US 6, 813, 726).

As per claim 6:

Schmitz discloses a method for providing user authentication comprising: **[FIG.1]**
receiving by an intermediate unit, from an authentication unit via a first secondary channel, an authentication code for a first unit; and **[col.6, line 65 – col.7, line 3 and 38-42]**

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re-transmitting, by the intermediate destination unit, the authentication code to the first unit via a second secondary channel in a way that is transparent to a user of the first unit. **[col.4, lines 1-5 and col.7, lines 61-64]**

Schmitz discloses a receiver 3 or 4 is referring to the claimed intermediate unit, the authorization computer 2 refers to the claimed authentication unit, the data input apparatus is the first unit (col.4, lines 1-2), and the transaction authorization number TAN refers to claimed authentication code (col.6, lines 57-59). The claimed invention broadly discloses a first and secondary channel where this may be given in light as separate or different channels used for transmitting communication purposes. Schmitz teaches separate transmission paths between the data input apparatus and the authorization computer on the other hand, and between the authorization computer and the receiver unit on the other hand (col.4, lines 1-5). Further, Schmitz discloses the authorization computer generates a transaction signal such as the transaction authorization number TAN or comparable password to send to the receiver along a separate transmission path (col.8, lines 25-29). Thus, Schmitz provides first channel for receiving the authentication code by the receiver (intermediate destination unit) from the authorization computer (col.8, lines 25-29) and obviously re-transmits by furnishing the (same) TAN to the data input apparatus on another secondary channel (col.7, lines 60-64). However, Schmitz did not explain further that the communications between the intermediate unit, authentication unit, and the first unit is transparent to a user.

Dahlen discloses the invention of at least one coupling facility is coupled to one or more other coupling facilities using one or more peer connections (col.6, lines 33-35)

referred to as primary coupling facility and secondary coupling facility. The peer ISC link can transmit both primary message commands and secondary message commands in either direction. This may be physically represented by either two unidirectional links, one with a sender channel on the primary coupling facility and a receiver channel on the second coupling facility, and the second link oppositely configured (col.8, lines 3-13). Dahlen discloses duplexing of the structures is performed in a manner that is transparent to the users of the structures where the user is unaware that the structure and thus the command are duplexed. Dahlen disclose high-availability design of coupling facility structures is provided by duplexing a desired structure in two separate coupling facilities. This design improves on the recovery times and impacts of existing recovery techniques, while also provides for a consistent recovery design across various structure types (col.6, lines 39-50). Further, Dahlen discloses the duplexing provides for parallel execution of the commands and for efficient re-execution of the commands on congested links (col.6, lines 60-65).

Therefore, it would have been obvious for a person of ordinary skills in the art to combine the teaching of sending, receiving and re-transmitting communications on separate channels of Schmitz with Dahlen teaching of parallel execution of commands and duplexing in separate coupling facilities using one or more peer connections that is transparent to a user because this provides consistent recovery design (see Dahlen on col.6, lines 48-50), efficient re-execution of the commands on congested links (see Dahlen on col.6, lines 63-65) where the user is unaware (see Dahlen on col.6, lines 39-42).

As per claim 7: See Schmitz on col.2, line 60 – col.3, line 4 and col.3, lines 54-55; discusses the step of transforming the authentication code prior to the step of re-transmitting via the second secondary channel.

As per claim 8:

Schmitz discloses a method for providing user authentication comprising:

sending, by a first unit, user identification data to an authentication unit; **[col.5, lines 59-63]**

receiving a re-transmitted authentication code that was previously sent by an authentication unit to an intermediate destination unit; and **[col.6, line 65 – col.7, line 3 and 38-42]**

in response to receiving the re-transmitted authentication code from the intermediate destination unit, returning the authentication code to the authentication unit. **[FIG.1 and col.7, lines 61-64]**

Schmitz discloses a receiver 3 or 4 is referring to the claimed intermediate unit, the authorization computer 2 refers to the claimed authentication unit, the data input apparatus is the first unit (col.4, lines 1-2), and the transaction authorization number TAN refers to claimed authentication code (col.6, lines 57-59). The claimed invention broadly discloses a first and secondary channel where this may be given in light as separate or different channels used for transmitting communication purposes. Schmitz teaches separate transmission paths between the data input apparatus and the authorization computer on the other hand, and between the authorization computer and the receiver unit on the other hand (col.4, lines 1-5). Further, Schmitz discloses the

authorization computer generates a transaction signal such as the transaction authorization number TAN or comparable password to send to the receiver along a separate transmission path (col.8, lines 25-29). Thus, Schmitz provides first channel for receiving the authentication code by the receiver (intermediate destination unit) from the authorization computer (col.8, lines 25-29) and obviously re-transmits by furnishing the (same) TAN to the data input apparatus on another secondary channel (col.7, lines 60-64). However, Schmitz did not explain further that the communications between the intermediate unit, authentication unit, and the first unit is transparent to a user.

Dahlen discloses the invention of at least one coupling facility is coupled to one or more other coupling facilities using one or more peer connections (col.6, lines 33-35) referred to as primary coupling facility and secondary coupling facility. The peer ISC link can transmit both primary message commands and secondary message commands in either direction. This may be physically represented by either two unidirectional links, one with a sender channel on the primary coupling facility and a receiver channel on the second coupling facility, and the second link oppositely configured (col.8, lines 3-13). Dahlen discloses duplexing of the structures is performed in a manner that is transparent to the users of the structures where the user is unaware that the structure and thus the command are duplexed. Dahlen disclose high-availability design of coupling facility structures is provided by duplexing a desired structure in two separate coupling facilities. This design improves on the recovery times and impacts of existing recovery techniques, while also provides for a consistent recovery design across various structure types (col.6, lines 39-50). Further, Dahlen discloses the duplexing

provides for parallel execution of the commands and for efficient re-execution of the commands on congested links (col.6, lines 60-65).

Therefore, it would have been obvious for a person of ordinary skills in the art to combine the teaching of sending, receiving and re-transmitting communications on separate channels of Schmitz with Dahlen teaching of parallel execution of commands and duplexing in separate coupling facilities using one or more peer connections that is transparent to a user because this provides consistent recovery design (see Dahlen on col.6, lines 48-50), efficient re-execution of the commands on congested links (see Dahlen on col.6, lines 63-65) where the user is unaware (see Dahlen on col.6, lines 39-42).

As per claim 9: See Schmitz on col.6, line 65 – col.7, line 3 and 9-10; discusses the step of controlling a short range receiver to receive the re-transmitted authentication code in response to receiving notification from the authentication unit and wherein returning the authentication code to the authentication unit includes returning the authentication code in a way that is transparent to the user of the first unit.

As per claim 16:

Schmitz discloses an apparatus for providing user authentication comprising:
[FIG.1]

means for receiving from an authentication unit via a first secondary channel, an authentication code for a first unit; and **[col.6, line 65 – col.7, line 3 and 38-42]**

means for re-transmitting the authentication code to the first unit via a second secondary channel in a way that is transparent to a user of the first unit. **[col.4, lines 1-5 and col.7, lines 61-64]**

Schmitz discloses a receiver 3 or 4 is referring to the claimed intermediate unit, the authorization computer 2 refers to the claimed authentication unit, the data input apparatus is the first unit (col.4, lines 1-2), and the transaction authorization number TAN refers to claimed authentication code (col.6, lines 57-59). The claimed invention broadly discloses a first and secondary channel where this may be given in light as separate or different channels used for transmitting communication purposes. Schmitz teaches separate transmission paths between the data input apparatus and the authorization computer on the other hand, and between the authorization computer and the receiver unit on the other hand (col.4, lines 1-5). Further, Schmitz discloses the authorization computer generates a transaction signal such as the transaction authorization number TAN or comparable password to send to the receiver along a separate transmission path (col.8, lines 25-29). Thus, Schmitz provides first channel for receiving the authentication code by the receiver (intermediate destination unit) from the authorization computer (col.8, lines 25-29) and obviously re-transmits by furnishing the (same) TAN to the data input apparatus on another secondary channel (col.7, lines 60-64). However, Schmitz did not explain further that the communications between the intermediate unit, authentication unit, and the first unit is transparent to a user.

Dahlen discloses the invention of at least one coupling facility is coupled to one or more other coupling facilities using one or more peer connections (col.6, lines 33-35)

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referred to as primary coupling facility and secondary coupling facility. The peer ISC link can transmit both primary message commands and secondary message commands in either direction. This may be physically represented by either two unidirectional links, one with a sender channel on the primary coupling facility and a receiver channel on the second coupling facility, and the second link oppositely configured (col.8, lines 3-13). Dahlen discloses duplexing of the structures is performed in a manner that is transparent to the users of the structures where the user is unaware that the structure and thus the command are duplexed. Dahlen disclose high-availability design of coupling facility structures is provided by duplexing a desired structure in two separate coupling facilities. This design improves on the recovery times and impacts of existing recovery techniques, while also provides for a consistent recovery design across various structure types (col.6, lines 39-50). Further, Dahlen discloses the duplexing provides for parallel execution of the commands and for efficient re-execution of the commands on congested links (col.6, lines 60-65).

Therefore, it would have been obvious for a person of ordinary skills in the art to combine the teaching of sending, receiving and re-transmitting communications on separate channels of Schmitz with Dahlen teaching of parallel execution of commands and duplexing in separate coupling facilities using one or more peer connections that is transparent to a user because this provides consistent recovery design (see Dahlen on col.6, lines 48-50), efficient re-execution of the commands on congested links (see Dahlen on col.6, lines 63-65) where the user is unaware (see Dahlen on col.6, lines 39-42).

As per claim 17: See Schmitz on col.2, line 60 – col.3, line 4 and col.3, lines 54-55; discusses a transformation circuit that transforms the authentication code prior to re-transmitting via the second secondary channel.

Allowable Subject Matter

7. Claims 1-5 and 13-15 are allowed.

Prior arts such as the Schmitz and Dahlen combination teaches the intermediate unit receiving via a first secondary channel an authentication code from an authentication unit for the first unit and re-transmitting the authentication code to the first unit via a secondary channel in a way that is transparent to the user of the first unit. However, prior art fails to teach the above limitations with the claimed sending, by a first unit, user identification data to an authentication unit whereby using the user identification data to determine which intermediate destination unit will receive an authentication code to be used to authenticate the user whereby receiving in response to receiving the re-transmitted authentication code from the intermediate destination unit, returning the authentication code to the authentication unit and authenticating the user when the returned authentication code is determined to be suitable. Thus, prior art whether alone or in combination cannot not read on claims 1-5 and 13-15.

Response to Arguments

8. Applicant's arguments, filed 1/19/2007, with respect to the rejection(s) of claim(s) 6-9, 16 and 17 under Schmitz have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the Schmitz and Dahlen combination.

Independent claims 6, 8, and 16 does not recite all the allowable subject matter as disclosed in claims 1, 10, and 13. Claims 6 and 16 broadly recites receives the authentication code from an authentication unit and re-transmitting the authentication code to intermediate destination unit via different channels. The claimed re-transmitting the authentication code can broadly interpret as transmitting the same authentication code to another unit where the claimed re-transmitting would not mean the same if it were to retransmit the same authentication code to the same unit. Claim 8 broadly recites sending user identification data to an authentication unit, receiving the retransmitted code, and in addition in response to receiving the re-transmitted authentication code from the intermediate destination unit, returning the authentication code to the authentication unit. Claims 6, 8, and 16 does not include the process of what is being received by the intermediate unit and come about the authentication code in addition to sending the authentication code, retransmitting the authentication code from the intermediate destination unit, returning the authentication code to the authentication unit and to authenticate the user with the returned authentication code.

As discussed above, claim 6, 8, and 16 recites different elements of claims 1, 10, and 13 but does not have the combined elements that made claims 1, 10, and 13 allowable. Schmitz discloses a receiver 3 or 4 is referring to the claimed intermediate unit, the authorization computer 2 refers to the claimed authentication unit, the data input apparatus is the first unit (col.4, lines 1-2), and the transaction authorization number TAN refers to claimed authentication code (col.6, lines 57-59). The claimed invention broadly discloses a first and secondary channel where this may be given in light as separate or different channels used for transmitting communication purposes. Schmitz teaches separate transmission paths between the data input apparatus and the authorization computer on the other hand, and between the authorization computer and the receiver unit on the other hand (col.4, lines 1-5). Further, Schmitz discloses the authorization computer generates a transaction signal such as the transaction authorization number TAN or comparable password to send to the receiver along a separate transmission path (col.8, lines 25-29). Thus, Schmitz provides first channel for receiving the authentication code by the receiver (intermediate destination unit) from the authorization computer (col.8, lines 25-29) and obviously re-transmits by furnishing the (same) TAN to the data input apparatus on another secondary channel (col.7, lines 60-64). However, Schmitz did not explain further that the communications between the intermediate unit, authentication unit, and the first unit is transparent to a user. Thus, Schmitz reads on claims 6, 8, and 16 because the claim language broadly recites a method and an apparatus for providing user authentication comprising the sending or receiving of the authentication code and re-transmitting the authentication code to

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another unit via first and secondary channels. However, Schmitz did not include that is transparent to a user. Thus, a secondary prior art is brought forth to teach this limitation.

As for Dahlen, the invention includes at least one coupling facility is coupled to one or more other coupling facilities using one or more peer connections (col.6, lines 33-35) referred to as primary coupling facility and secondary coupling facility. The peer ISC link can transmit both primary message commands and secondary message commands in either direction. This may be physically represented by either two unidirectional links, one with a sender channel on the primary coupling facility and a receiver channel on the second coupling facility, and the second link oppositely configured (col.8, lines 3-13). Dahlen discloses duplexing of the structures is performed in a manner that is transparent to the users of the structures where the user is unaware that the structure and thus the command are duplexed. Dahlen disclose high-availability design of coupling facility structures is provided by duplexing a desired structure in two separate coupling facilities. This design improves on the recovery times and impacts of existing recovery techniques, while also provides for a consistent recovery design across various structure types (col.6, lines 39-50). Further, Dahlen discloses the duplexing provides for parallel execution of the commands and for efficient re-execution of the commands on congested links (col.6, lines 60-65). Therefore, it would have been obvious for a person of ordinary skills in the art to combine the teaching of sending, receiving and re-transmitting communications on separate channels of Schmitz with the teaching of parallel execution of commands and duplexing in separate coupling facilities

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using one or more peer connections that is transparent to a user because this provides consistent recovery design (Dahlen-col.6, lines 48-50), efficient re-execution of the commands on congested links (Dahlen-col.6, lines 63-65) where the user is unaware (Dahlen -col.6, lines 39-42).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEYNNA T. HA whose telephone number is (571) 272-3851. The examiner can normally be reached on Monday - Thursday (7:00 - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LHa

Chankya B. Day
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